

Kern County Water Agency

Henry C. Garnett Water Purification Plant Expansion



CLIENT CONTACT

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PROJECT STATISTICS

Owner Kern County Water Agency

Dates 2008-2010

Our Fee \$1M

Construction Costs \$70M

SERVICES PROVIDED

Construction Management

- Construction Inspection
- Office Engineering

PROJECT ELEMENTS

- bar reinforcement
- basins
- clearwells
- diffusers
- earthwork
- filters
- mechanical systems
- mixing structure
- piping system
- pumping system
- pump station
- structural concrete
- water treatment

PROJECT OVERVIEW

The Henry C. Garnett Water Purification Plant is a conventional water treatment facility that was expanded from a peaking capacity of 38 million gallons per day (mgd) to 72 mgd with the contracted annual production increasing from 25,000 to 53,000 acre-feet (af) during a 30-year ramp-up period.

MNS provided project inspection and administration for the \$70M plant expansion which includes construction of a new raw water pump station; new clearwells; new Train B flash mixing structure; flocculation and sedimentation basins; new filters, diffusers, and backwash piping and pumping system; new chemical feed facility; miles of yard piping ranging from 4-inch to 72-inch; massive

excavation and grading, over 30,000 cubic yards of structural concrete, bar reinforcement, mechanical systems, instrumentation and controls.

Coordination with the plant staff was critical since daily operation could not be interrupted while constructing the new facilities and tying into the existing system.

